

Name: Key**Lesson 6.5 – Using the Graphing Calculator****Buttons you should check before using calculator:**

- 1) MODE *All left except DEGREE*
- 2) FORMAT *All left*
- 3) MEM *to manage programs or clear space*

**Buttons you need for this unit**

- 1) Y= *to input equations*
- 2) ZOOM *Zstandard is 10x10 (same as assignment)*
- 3) TBLSET *Tblstart = 0  
DTbl = 1*
- 4) TABLE *to see x/y chart for graph*
- 5) GRAPH *to see graph*
- 6) CALC *to find points on graph*

**Example**

For the equation  $= -\frac{1}{2}x + 4$ , create a table of values from -6 to 6 that goes up by 2.

x	y
-6	7
-4	6
-2	5
0	4
2	3
4	2
6	1

**Assignment**

1) For the equation  $y = \frac{3}{4}x - 6$ , create a table of values from -8 to 8 that goes up by 4.

x	y
-8	-12
-4	-9
0	-6
4	-3
8	0

2) For the equation  $y = -2x + 8$ , create a table of values from -1 to 5 and goes up by 1.

x	y
-1	10
0	8
1	6
2	4
3	2
4	0
5	-2

3) For the equation  $y + 2 = 3x - 1$ , create a table of values from -2 to 2 that goes up by 0.5

$y = 3x - 3$

x	y
-2	-9
-1.5	-7.5
-1	-6
-0.5	-4.5
0	-3
0.5	-1.5
1	0
1.5	1.5
2	3

**Example #1** Use your calculator to help solve the following system of equations

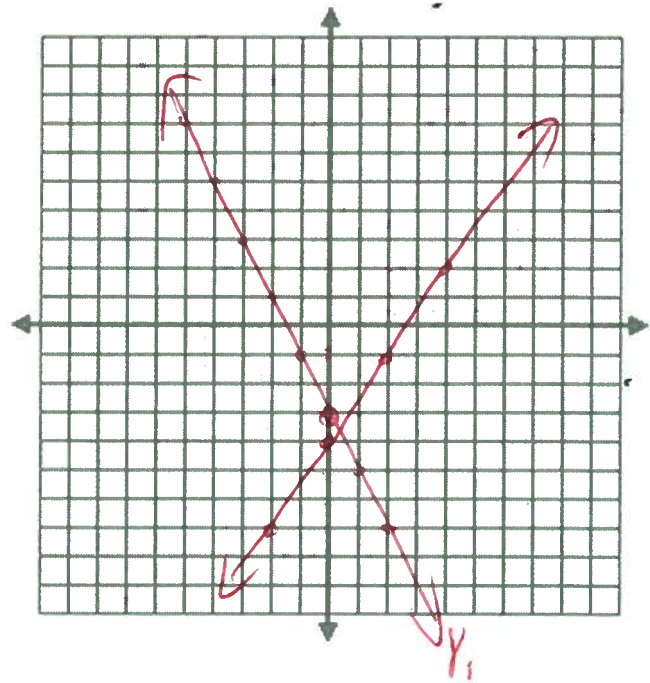
$$y_1 = -2x - 3 \quad Y_1 =$$

$$y_2 = \frac{3}{2}x - 4 \quad Y_2 =$$

**CALC** intersection  
 enter enter enter  
 (-3, -3.6)

**TABLE**

X	Y <sub>1</sub>	X	Y <sub>2</sub>
0	-3	0	-4
-2	1	2	-1



**Example #2** Use your calculator to help solve the following system of equations

- ①  $3x + 2y = -4$
- ②  $4x - 2y = 6$

$$\textcircled{1} \quad 2y = -3x - 4$$

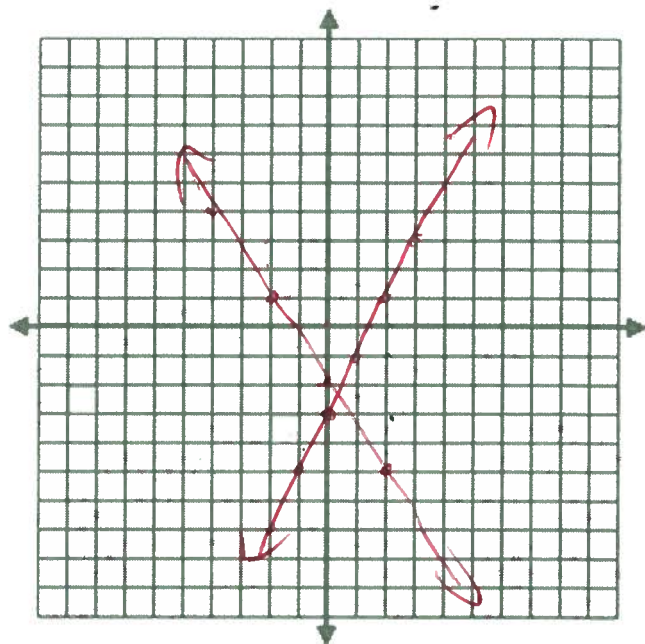
$$y = -\frac{3}{2}x - 2$$

$$\textcircled{2} \quad -2y = -4x + 6$$

$$y = 2x - 3$$

intersection = (0.3, -2.4)

X	Y	X	Y

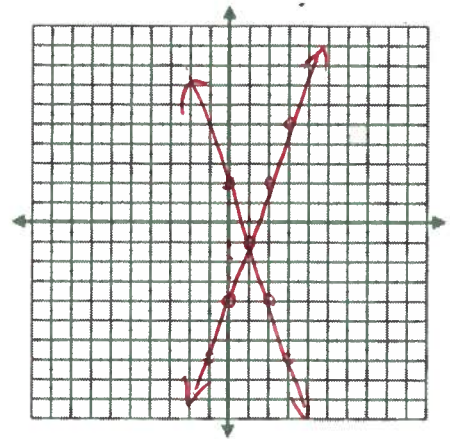


**Assignment:**

1)  $y = 3x - 4$   
 $y = -3x + 2$

CALC

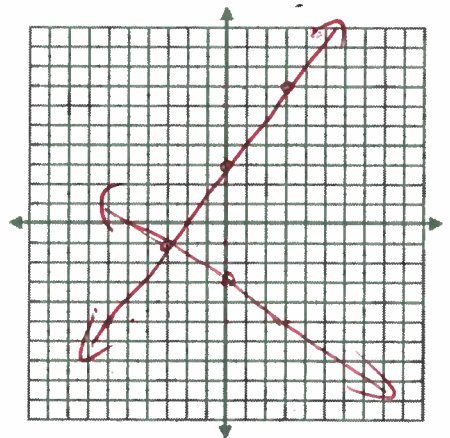
intersection =  $(1, -1)$



2)  $y = \frac{4}{3}x + 3$   
 $y = -\frac{2}{3}x - 3$

CALC

intersection =  $(-3, -1)$



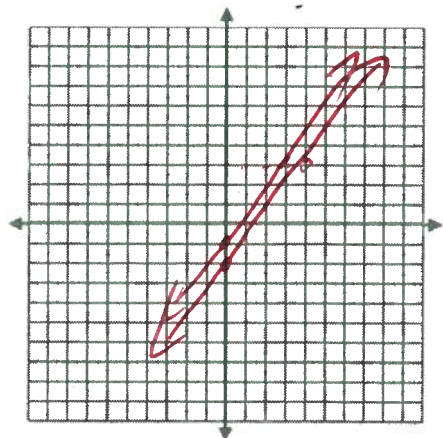
3)  $y = \frac{5}{4}x - 2$   
 $y = \frac{5}{4}x - 1$

CALC

ERR: SIGN CHNG.

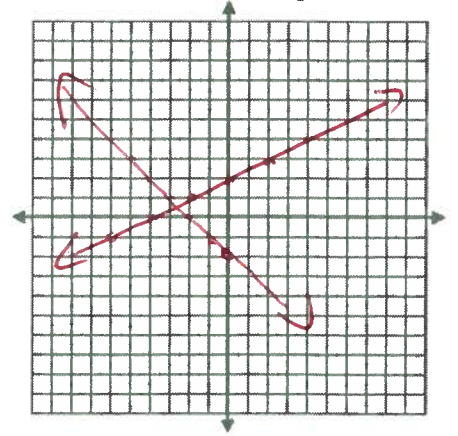
Parallel

No solution



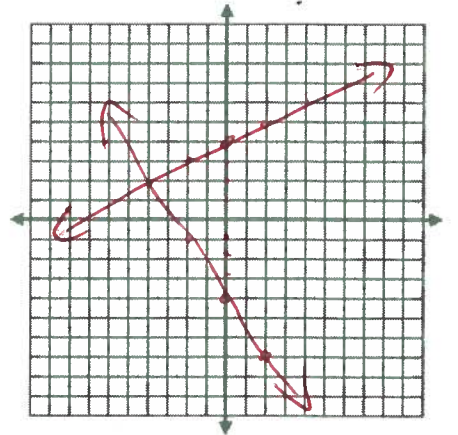
4)  $y = \frac{1}{2}x + 2$   
 $y = -x - 2$

intersection  
 $= (-2.7, 0.7)$



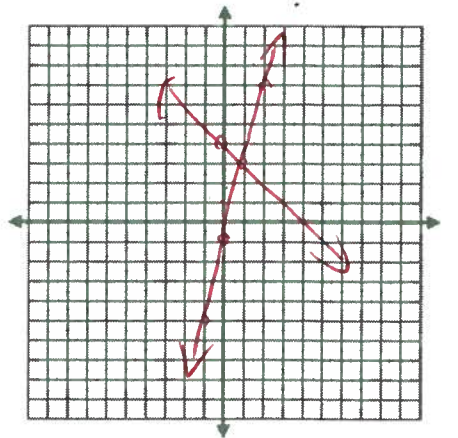
5)  $y = -\frac{3}{2}x - 4$   
 $y = \frac{1}{2}x + 4$

intersection  
 $(-4, 2)$



6)  $y = 4x - 1$   
 $y = -x + 4$

intersection  
 $(1, 3)$

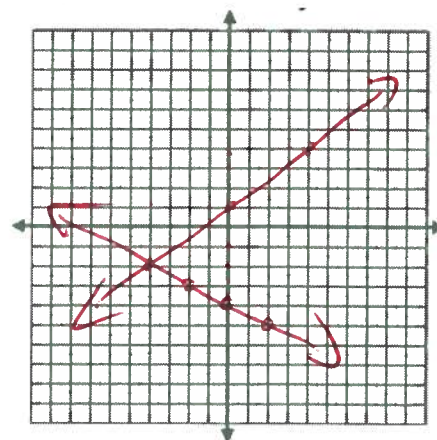


$$y = \frac{3}{4}x + 1$$

7)

$$y = -\frac{1}{2}x - 4$$

intersection  
 (-4, -2)

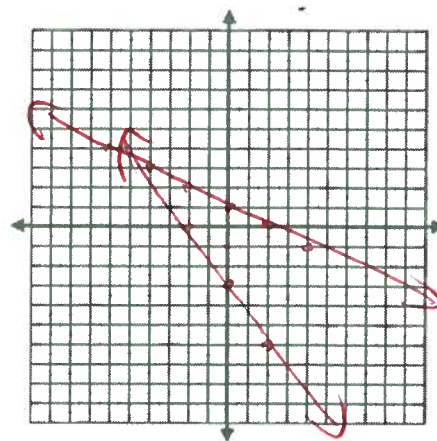


$$y = -\frac{3}{2}x - 3$$

8)

$$y = -\frac{1}{2}x + 1$$

intersection  
 (-4, 3)



**Answers**

- 1) (1,-1) 2) (-3,-1) 3) No Solution  
 4) (-3,1) 5) (-4,2) 6) (1,3)  
 7) (-4,-2) 8) (-4,3)



**Practice Quiz:**

1) For the equation  $y = -\frac{3}{4}x + 6$ , create a table of values from -12 to 12 that goes up by 4

TABLE

x	y
-12	15
-8	12
-4	9
0	6
4	3
8	0
12	-3

enter equation into Y,  
TBLSET  
 TblStart = -12  
 $\Delta Tbl = 4$

2) Use your calculator to help solve the following system of equations

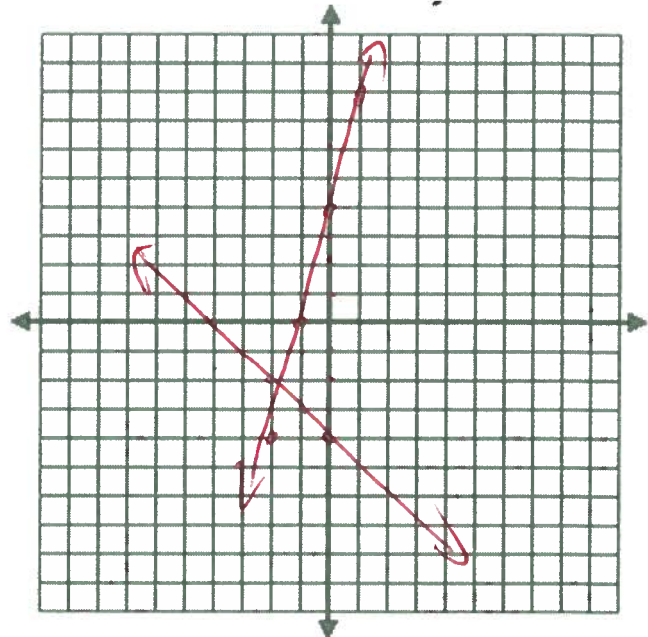
$$y_1 = 3x + 4$$

$$y_2 = -x - 4$$

TABLE

x	y
0	4
1	7

x	y
0	-4
1	-5



CALC intersection = (-2, -2)

